

Title (en)

Optical device, method of manufacturing the same, optical module, optical transmission system

Title (de)

Optische Vorrichtung, Herstellungsverfahren, optisches Modul, und optisches Transmissionssystem

Title (fr)

Dispositif optique et méthode de fabrication, module optique et système de transmission optique

Publication

EP 1349243 A3 20050112 (EN)

Application

EP 03006807 A 20030326

Priority

JP 2002097234 A 20020329

Abstract (en)

[origin: EP1349243A2] In a conventional optical device which mounts a semiconductor light emitting element, the processing is difficult and a manufacturing process cost is expensive because of the necessity of forming via holes in a substrate. <??>An optical device comprises a laser diode which needs heat radiation, a glass substrate which is integrally molded into a mold glass for arranging the laser diode, a metallic heat sink arranged at an edge of the glass substrate for radiating heat generated from the laser diode, wherein an active layer proximity surface of the laser diode is arranged to oppose the heat sink, both of them are connected with a conductive paste through a lateral groove formed in the glass substrate. <IMAGE> <IMAGE> <IMAGE> <IMAGE> <IMAGE>

IPC 1-7

H01S 5/022; **H01S 5/024**; **H01L 33/00**; **H01L 23/13**; **G02B 6/42**; **H05K 1/02**

IPC 8 full level

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CPC (source: EP US)

H01S 5/02326 (2021.01 - EP US); **H01L 2224/48091** (2013.01 - EP US); **H01L 2224/48227** (2013.01 - EP US); **H01S 5/0225** (2021.01 - EP US); **H01S 5/02345** (2021.01 - EP US); **H01S 5/0236** (2021.01 - EP US); **H01S 5/024** (2013.01 - EP US); **H01S 5/02438** (2013.01 - EP US); **H01S 5/4087** (2013.01 - EP US)

Citation (search report)

- [XY] WO 0214917 A1 20020221 - MATSUSHITA ELECTRIC IND CO LTD [JP], et al
- [Y] US 6156980 A 20001205 - PEUGH DARREL EUGENE [US], et al
- [A] EP 0638829 A1 19950215 - NIPPON TELEGRAPH & TELEPHONE [JP]
- [X] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 11 29 November 1996 (1996-11-29)

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 1349243 A2 20031001; **EP 1349243 A3 20050112**; **EP 1349243 B1 20080430**; CN 1292280 C 20061227; CN 1495458 A 20040512; DE 60320613 D1 20080612; DE 60320613 T2 20090610; US 2004028095 A1 20040212; US 2006281207 A1 20061214; US 7106766 B2 20060912; US 7723137 B2 20100525

DOCDB simple family (application)

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